IN THE CLAIMS:

Please amend claims 3-6 and 9-10 as follows:

1.   (Previously Presented) A method for searching at least one character string image embedded in an image, comprising:

        providing the image;

        detecting a character region in the image based upon a shape thereof;

        extracting a first image feature of the character region;

        receiving an input of a character string of interest by a user;

        extracting a second image feature from the input character string;

        comparing the first image feature with the second image feature to determine a level of similarity; and

        outputting the character region or the input image comprising the character region based on the level of similarity.

2.   (Previously Presented) The method for searching at least one character string image in an image, as claimed in claim 1, wherein at the step of outputting said character region outputs the character regions in a descending order of a level of similarity.

3.   (Currently Amended) The method for searching at least one character string image in an image, as claimed in claim 1, wherein the step of detecting said character region ~~determines the character region where~~ involves extracting equi-luminance pixel strings, each of which has a luminance difference from a background in a pre-designated range and ~~is consecutive as long as~~ has a length of a pre-designated extent, ~~are locally concentrated~~.

4.   (Currently Amended) The method for searching at least one character string image in an image, as claimed in claim 1, wherein the step of detecting said character region ~~determines the character region where~~ involves extracting equi-luminance pixel strings, each of which has a length equal to or longer than a pre-designated length in both vertical

and horizontal directions and has a luminance difference <u>from a background</u> within a pre-designated range in both of the vertical and horizontal directions.

5. (Currently Amended) The method for searching at least one character string image in an image, as claimed in claim 1, wherein both the first image feature and the second image feature to be extracted are one-dimensional feature strings ~~of the~~ <u>whose</u> numbers of edges in [[the]]<u>a</u> vertical direction <u>are</u> obtained by ~~binarization of~~ <u>binarizing luminance of each pixel and counting numbers of luminance changes in the</u> character regions<u>,</u> when the character strings are arrayed horizontally, and

the step of determining a level of similarity ~~determines the level of similarity by~~ <u>involves</u> elastic matching of the one-dimensional feature strings both of which constitute the first image feature and the second image feature.

6. (Currently Amended) The method for searching at least one character string image in an image, as claimed in claim 1, wherein both the first image feature and the second image feature to be extracted are one-dimensional feature strings [[of the]] <u>whose</u> numbers of edges <u>in a horizontal direction are obtained by binarizing luminance of each pixel and counting numbers of luminance changes in</u> [[of]] the ~~binarized~~ character regions<u>,</u> ~~in the horizontal direction~~ when the character strings are arrayed vertically, and

the step of determining a level of similarity ~~determines the level of similarity by~~ <u>involves</u> elastic matching of the one-dimensional feature strings of the first image feature and the second image feature.

7. (Previously Presented) An apparatus for searching character string images in an image comprising:

a means for entering an image,

a means for detecting a character region from the frame of the entered image on the basis of its shape,

a means for extracting a first image feature of the character area,

an input means for entering a desired character string by a user,

3

a character image generating means for drawing an image characters corresponding to the input character string,

a means extracting a second image feature from the generated character image,

a feature matching a means for matching the first and the second image features and determining a level of similarity, and

an output means for outputting a matched character region or the input image comprising the matched character region.

8.   (Previously Presented) The apparatus for searching character string image in an image, as claimed in claim 7, wherein said output means outputs the character regions in the descending order of the level of similarity obtained by the feature matching means.

9.   (Currently Amended) The apparatus for searching character string image in an image, as claimed in claim 7, wherein said character region detecting means determines the character region by judging a locally concentrated presence of extracts equi-luminance pixel strings each of which [[is]] has a length equal to or linger longer than a pre-designated length and has a luminance difference from a background within a pre-designated range.

10.   (Currently Amended) The apparatus for searching character string image in an image, as claimed in claim 7, wherein both the first image feature and the second image feature to be extracted are one-dimensional feature strings where-the whose numbers of edges in [[the]]a vertical direction are obtained by binarization of binarizing luminance of each pixel and counting numbers of luminance changes in the character regions, when the character strings are arrayed horizontally, and said feature matching means performs feature matching by elastic matching of the one-dimensional feature strings both of which constitute the first image feature and the second image feature.

11.   (Previously Presented) A program stored on a computer readable medium for processing of character search in an image, comprising:

a module for searching a character string image,

4

a module for detecting a character region from the frame of an entered image on the basis of its shape,

a module for extracting a first image feature of the character area,

a module for receiving an input of a character string input by a user,

a module for drawing an image of the input character string to be searched for,

a module for extracting a second image feature from the drawn character area image,

a module for matching the first image feature and the second image feature to determine a level of similarity, and

a module for outputting the character region containing the input character string in respect of which the level of similarity has been determined.

12. (Previously Presented) The program as claimed in claim 11, wherein the module for detecting said character region includes extracting lines with a width in a specific range and extracting a concentrated region on the extracted lines as said character region.

13. (Previously Presented) The program as claimed in claim 12, wherein the line width is decided by a number of pixels with a luminance within a specific range or of equi-luminance.

14. (Previously Presented) The program as claimed in claim 13, wherein the line width is taken in vertical and horizontal directions.

15. (Previously Presented) The program as claim in claim 14, wherein the concentrated region is decided by projections of the lines in the vertical and horizontal directions.

16. (Previously Presented) The program as claimed in claim 12, wherein the module for detecting said character region extracts a character image feature string along one dimension of the character region or extracts the character image of interest by counting a number of edges with a predetermined luminance change.

17. (Previously Presented) The program as claimed in claim 12, further comprising a module for removing line border blurring by correcting a border pixel luminance value into a maximum or minimum luminance value of adjacent pixels.

18. (Previously Presented) The method as claimed in claim 1, further comprising a step of removing non-character background in the image by outlining the character region with a rectangle box having a sufficient margin, then removing pixels outside of the rectangle box, and wherein the outputting step outputs the character region with the rectangle box.

19. (Previously Presented) The program as claimed in claim 11, further comprising a module for removing non-character background in the image by outlining the character region with a rectangle box having a sufficient margin, then removing pixels outside of the rectangle box, and wherein the module for outputting outputs the character region with the rectangle box.